8

1

2

1

2

1

2

3

4

5

## WHAT IS CLAIMED IS:

 A method for using a decision engine to adjust parameter values of a financial account, the method comprising:

assigning to the financial account an account processing method that sets one or more parameter values of the financial account, the account processing method having an associated method override that modifies at least one of the one or more parameter values set by the account processing method;

providing to the decision engine a set of decision criteria comprising a set of decision elements each having one or more threshold values associated therewith, the set of decision elements corresponding to account attributes of the financial account;

providing to the decision engine the corresponding account attributes of the financial account;

obtaining from the decision engine a result indicating whether to apply the associated method override to the financial account, wherein the decision engine determines the result by applying the decision criteria to the account attributes; and

applying the associated method override to the financial account in response to a result indicating that the associated method override is to be applied.

## 2. The method of claim 1, wherein:

the set of decision criteria comprises a lookup table, an entry in the lookup table being defined by the decision elements and the one or more threshold values, and each entry in the lookup table being associated with a result value indicating whether to apply the associated method override to the financial account; and

applying the decision criteria to the account attributes comprises performing a table lookup operation on the lookup table using the corresponding account attributes of the financial account.

- 3. The method of claim 1, wherein applying the associated method override to the financial account comprises updating a record of the financial account to indicate that the associated method override is applied.
  - The method of claim 1, wherein the result value is one of:
     a first value indicating that the associated method override is to be applied;

2

3

4

5

6

7

8

3

a second value indicating that a currently applied method override is to be removed;

a third value indicating that the associated method override is not to be applied and that no currently applied method override is to be removed; and

a fourth value indicating that a formerly applied method override is to be reapplied.

## 5. The method of claim 4, further comprising:

in response to the first value, updating a record of the financial account to indicate that the associated method override is applied;

in response to the second value, updating the record of the financial account to remove the currently applied method override;

in response to the third value, leaving the record of the financial account unchanged; and

in response to the fourth value:

identifying a formerly applied method override from the record of the financial account, the formerly applied method override being not currently applied to the financial account; and

updating the record of the financial account to indicate that the formerly applied method override is applied.

- The method of claim 1, wherein the financial account is a credit card
  account.
- The method of claim 1, wherein the one or more parameter values are used to compute a charge against the financial account.
- 8. A method for adjusting parameter values for a financial account, the method comprising:

selecting an account processing method that sets one or more parameter values for the financial account, the account processing method being overrideable by a first method override that changes at least one of the one or more parameter values set by the account processing method;

identifying a first lookup table associated with the selected account processing method;

9 10

11

12

13

14

9

10

identifying from the first lookup table a set of first decision elements, the first decision elements corresponding to a set of first account attributes; retrieving the set of first account attributes from a record of the financial account: performing a first table lookup in the first lookup table using the set of first account attributes, the first table lookup returning a reference to a second lookup table; identifying from the second lookup table a set of second decision elements, the second decision elements corresponding to a set of second account attributes; retrieving the set of second account attributes from the record of the financial account: performing a second table lookup in the second lookup table using the set of second account attributes, the second table lookup returning a result indicating whether the first method override is to be applied to the financial account; and based on the result, updating the record of the financial account to cause the first method override to be applied to the financial account. 9. The method of claim 8, wherein the set of first account attributes is disjoint from the set of second account attributes. 10. The method of claim 8, wherein the result has a value that is one of a first value, a second value, a third value, and a fourth value, and wherein updating the record of the financial account to cause the method override to be applied to the financial account comprises: in response to the first value, adding the method override to the record of the financial account, thereby causing the method override to be applied to the financial account; in response to the second value, removing a currently applied method override from the record of the financial account, thereby causing the currently applied method

from the record of the financial account, thereby causing the currently applied method override to cease to be applied to the financial account;

in response to the third value, making no changes to the record of the financial

in response to the fourth value:

determining a formerly applied method override for the financial

account; and

account; and

15	adding the formerly applied method override to the record of the
16	financial account, thereby causing the formerly applied method override to be reapplied to the
17	financial account.
1	11. The method of claim 10, wherein the account processing method is
2	also overrideable by a second method override, and wherein the first value includes an
3	indication of which of the first and second method overrides is to be applied.
1	12. The method of claim 8, further comprising:
2	selecting a second account processing method, the second account processing
3	method being overrideable by a second method override;
4	identifying a third lookup table associated with the selected second account
5	processing method;
67781919	identifying from the third lookup table a set of third decision elements, the
17	third decision elements corresponding to a set of third account attributes;
-8	retrieving the set of third account attributes from the record of the financial
19	account;
	performing a third table lookup operation using the third lookup table and the
1.1	set of third account attributes, the third table lookup operation returning a reference to a
13	fourth lookup table;
13	identifying from the fourth lookup table a set of fourth decision elements, the
14	set of fourth decision elements corresponding to a set of fourth account attributes;
15	retrieving the set of fourth account attributes;
16	performing a fourth table lookup operation using the fourth lookup table and
17	the set of fourth account attributes, the fourth table lookup operation returning a second result
18	indicating whether the second method override is to be applied to the financial account; and
19	based on the second result, updating the record of the financial account to
20	cause the second method override to be applied to the financial account.
1	13. The method of claim 8, wherein the financial account is a credit card
2	account.
1	14. The method of claim 8, wherein the one or more parameter values are
2	used to compute a charge against the financial account.

10 11 15. A method for using a decision engine to adjust parameter values for a plurality of financial accounts, the method comprising:

selecting a financial account from the plurality of financial accounts, the selected financial account having associated therewith an account processing method that sets one or more parameter values of the selected financial account;

providing to the decision engine decision criteria comprising a set of decision elements each having one or more threshold values associated therewith, the set of decision elements corresponding to account attributes of the financial account;

providing to the decision engine the corresponding account attributes of the selected financial account;

obtaining from the decision engine a result value, wherein the decision engine determines the result value by applying the decision criteria to the corresponding account attributes; and

applying a method override indicated by the result value to the selected financial account, the method override causing one or more of the parameter values set by the account processing method to be adjusted.

- 16. The method of claim 15, wherein selecting a financial account from the plurality of financial accounts comprises selecting each of the financial accounts in turn.
- 17. The method of claim 15, wherein selecting a financial account from the plurality of financial accounts comprises accepting a user selection of a financial account.
- 18. A system for adjusting a processing parameter of a financial account, comprising:
- a first data store for storing financial account data for the financial account, the financial account data including account processing methods and associated method overrides applied to the financial account, the financial account data further including account history information;
- a second data store for storing decision rules for determining whether to apply a method override to the financial account based on the account history information; and
- a decision engine configured to communicate with the first data store and the second data store, the decision engine configured to retrieve the decision rules from the second data store and the account history information from the first data store, to determine

2

3

1

12 13 based on the decision rules and the account history information whether a method override should be applied to the financial account, and to apply the method override to the financial account.

- The system of claim 18, wherein the decision rules comprise a hierarchical set of lookup tables.
- 20. The system of claim 19, wherein the hierarchical set of lookup tables comprises:
- a method selection table, each entry in the method selection table corresponding to an overrideable method;
- a plurality of client allocation tables, each entry in each client allocation table corresponding to a combination of first decision elements; and
- a plurality of account qualification tables, each entry in each account qualification table corresponding to a combination of second decision elements,
- wherein a table lookup operation on the method selection table using one of the overrideable methods returns a reference to one of the plurality of client authentication tables.
- a table lookup operation on one of the plurality of client authentication tables using financial account data corresponding to the first decision elements returns a reference to one of the plurality of account qualification tables, and
- a table lookup operation on one of the plurality of account qualification tables using financial account data corresponding to the second decision elements returns a result value indicating whether the method override is to be applied to the financial account.
- 1 21. The system of claim 18, wherein the financial account is a credit card 2 account.
  - 22. The system of claim 18, further comprising a user interface configured to communicate with the first data store, wherein the user interface is configured to provide financial account data including whether a method override is applied to the financial account.
    - The system of claim 18, further comprising:

2

2

a conflict checking module configured to detect a combination of account processing methods and associated method overrides that creates a conflict when applied to a financial account and to issue a warning when the combination is detected.

24. A system for adjusting processing parameters of a plurality of financial accounts, comprising:

a first data store for storing financial account data for the plurality of financial accounts, the financial account data including account processing methods and associated method overrides applied to each of the plurality of financial accounts, the financial account data further including account history information for each of the plurality of financial accounts:

a second data store for storing decision rules for determining whether to apply a method override to one of the plurality of financial accounts based on the account history information:

an account selection module configured to select one of the plurality of financial accounts; and

- a decision engine configured to communicate with the first data store, the second data store, and the account selection module, the decision engine configured to retrieve the decision rules from the second data store and the account history information for the selected financial account from the first data store, to determine based on the decision rules and the account history information whether a method override should be applied to the selected financial account, and to apply the method override to the selected financial account.
- 25. The system of claim 24, wherein the account selection module is configured to select each of the plurality of financial accounts in turn.
- 26. The system of claim 24, wherein the account selection module is configured to accept a user selection of a financial account.